

IRPE Career Trajectories Study

In spring 2023, a study was undertaken to understand the career landscape of Institutional Research, Planning, and Effectiveness (IRPE) professionals in the California Community College (CCC) system. This study examines how the CCC IRPE field changed over the 10-year timeframe from 2012 to 2022 and includes data and information from multiple sources to provide a snapshot of:

- the types of IRPE positions in the field and their salaries,
- what the most common IRPE career trajectories are, and
- what less common pathways have been navigated.¹

This study answers the following questions:

1. How has CCC IRPE field changed over the 10-year timeframe from 2012 – 2021?
2. What are the chances to move to management position from an Analyst or Senior Analyst based on position availability?
3. How has salary progression looked in the past decade for the most common IRPE positions?
4. What are the most common CCC IRPE career trajectories?
5. How common is it to exit higher education altogether after entering the CCC IRPE field?
6. What is the most common career trajectory for CCC IRPE people who leave the CCC system?
7. How livable are the wages of the IRPE analyst position?

¹ These data are intended to be used to lay the foundation for a future project that would focus on uncovering potential inequities in career pathways as well as identifying ways to support researchers of color advance their IRPE careers.

Methodology

Data Sources

Original Data Source

We started by identifying the names and titles of Institutional Research, Planning and Effectiveness (IRPE) professionals in the California Community Colleges (CCC) system through two sources maintained by The RP Group: 1) attendee lists from the RP Conference between 2012 and 2022, and 2) list of IRPE professionals employed as of 2022 across the CCC system.

This original data source was used to match to two external data sources: Transparent California for salary information and LinkedIn to obtain career information for everyone in the original data source.

Matched Data Source: Transparent California

Transparent California is a public database of public employees in California published by the Nevada Policy Research Institute that obtains employees' names, titles, and salary information through public records requests. The original data source was queried for the most common terms in IRPE titles, and additional terms in common IRPE titles as they appeared in the Transparent California database were added for 14 search terms.²

The Transparent California database was then queried separately for each CCC district and college and each search term for all the available years between 2012 and 2022. This first phase database was then filtered for IRPE job classifications in the CCC system. The resulting names of people from this first phase were then entered/queried for all available entries in the Transparent California database. The results were again filtered for individuals with at least one IRPE job classification in any observed year (due to duplicate entries by name).

Matched Data Source: LinkedIn

Using the original data source, LinkedIn profiles were downloaded through a web scrape³ using all combinations of job titles available for the individuals in the list. The resulting dataset was then deduplicated. A manual check was then conducted to identify those who attended the RP Conferences but were not employed in the IRPE field. Of 2,409 unduplicated attendees, 1,254 attendees were discovered on LinkedIn for a match rate of 52%. Of these 1,254 attendees, 519 (41%) held at least one IRPE position in their job history.

The primary analytical file for the results related to LinkedIn included the following conditions:

² research', 'researcher', 'rsch', 'institutional', 'ie', 'ir', 'inst', 'instl', 'effectiveness', 'effec', 'planning', 'plng', 'data', 'accreditation'

³ [Web scrapping](#)

1. Only professionals with at least one IRPE job classification were included.
2. All jobs before the first IRPE job were excluded (data were too noisy as many graduate assistant, faculty, consulting, or non-higher education jobs made classification and trajectories difficult to interpret).
3. The dataset was truncated to the first and last available job description per individual.

Position Classification

The LinkedIn and Transparent California datasets resulted in almost 10,000 unique job titles, which needed to be classified into IRPE (Y/N) and the following hierarchy of IRPE positions:⁴

1. Substitute
2. Specialist
3. Analyst
4. Senior Analyst
5. Coordinator
6. Manager or Supervisor
7. Director
8. Dean
9. Vice President or Vice Chancellor
10. President or Chancellor



This classification was done manually by one of the researchers with iterative reclassification and sample quality checks. The identification of whether a position was IRPE was sometimes difficult, especially for positions outside of the CCC system (e.g., ‘Research Analyst’ or ‘Data Analyst’ can be situated inside or outside of a typical IRPE office). The classification did not distinguish between acting/interim and permanent positions (e.g., Acting/Interim Dean was classified as Dean). For example, the trajectory of Director to Dean to Director can be expected even though the Dean position could have been short-term and not permanent. Future analyses could look more into how prevalent acting or interim positions are for eventual promotion.

In addition, after initial classification, we noted some issues with the prevalence of certain categories or the introduction of noise or confusion of interpretation with the detailed hierarchy listed above. This was especially evident when analyzing the progression of positions. Therefore, we made the following adjustments to the classification system for all analyses looking at progression or promotion (Descriptive analysis, however, used the full classification):

⁴ According to salary scales

1. Any IRPE classification of Substitute, Specialist, or Coordinator was removed due to small sample size and introduction of noise.
2. Director, Manager, and Supervisor were combined into one category (low sample size of Manager and Supervisor did not warrant a separate category).

Additional Data Sources: District Human Resources Salary Scales and Home Prices



To make better and more reliable comparisons in terms of salaries across colleges and districts, all salary scales from the California Community College districts were downloaded in spring 2023. The first step in the salary scale for Research Analysts was used for the college and regional wage comparison. Since salaries varied by urbanicity or proximity to the coast and might not be a good indicator of actual purchasing power, we compared the salaries to the median home price in the county published by the California Association of Realtors.⁵ We then created a simple Housing Affordability calculation⁶ with the following assumptions: median housing price from the county, 20% downpayment, and expected mortgage based on a 30-year fixed mortgage rate.

To account for the fluctuating mortgage rates, we calculated the five-year average rate from April 2019 to March 2023,⁷ which was 3.96%. We then calculated what we call the “affordability metric” as the percentage of this expected mortgage (principal and interest (PI) payment) compared to the earned salary (first step of published salary scales for research analysts). The affordability metric can be interpreted as the percentage of the salary that would go towards a mortgage payment. More specifically, the percentage of the monthly salary would go towards PI payments when buying a median-priced home in the county with a 20% downpayment and a 3.96% interest rate. Typical home budgeting rules suggest PI payments should not exceed 35% (footnote 3) of the monthly income. We therefore highlighted affordability metric values above 35% as an indicator that home affordability would most likely be out of reach given the assumptions and parameters listed above.

Results by Research Question

The following summarizes the response to each of the research questions.

⁵ [Fourth Quarter 2020 Median Home Price Index](#)

⁶ Approach taken from the Housing Affordability Index from California Association of Realtors (HAI).

⁷ [30-Year Fixed Rate Mortgage Average in the United States](#)

How has CCC IRPE field changed over the 10-year timeframe from 2012 – 2021?

- CCC IRPE field has doubled from 214 to 432 total positions.
- Biggest increase was observed in Senior Analyst positions (4.7 times higher) and Vice President/Vice Chancellor positions (6 times higher).
- Analyst and Dean positions have also about doubled

What are the chances to move to management position from an Analyst or Senior Analyst based on position availability?

- With the large increase in Senior Analyst positions, the chances of moving from Analyst to Senior Analyst improved from 12:1 to 4:1.
- Chances to move up from Senior Analyst to Director decreased from 0.2:1 to 0.7:1. This decrease is primarily related to the strong increase in senior-level positions (470%) whereas director positions only increased 33%.

Number of CCC IRPE Positions per Year

Year	Specialist	Analyst	Senior Analyst	Coordinator	Manager/ Supervisor	Director	Dean	Vice-President/ Vice-Chancellor	Total
2012	18	105	9	7	1	49	23	2	214
2013	20	112	10	9	1	55	33	6	246
2014	19	136	13	9	1	44	34	11	267
2015	16	138	21	11	1	43	34	10	274
2016	29	184	27	8	1	46	34	15	344
2017	28	212	36	4	2	46	43	14	385
2018	35	229	36	12	4	52	52	11	431
2019	26	202	50	4	4	60	38	12	396
2020	28	209	37	4	1	62	43	13	397
2021	35	214	51	2	2	65	49	14	432

Year	Specialist	Analyst	Senior Analyst	Coordinator	Manager/ Supervisor	Director	Dean	Vice-President/ Vice-Chancellor	Total
% increase	94%	104%	467%	-71%	100%	33%	113%	600%	102%
					21%				
RNHP `12	0.2	11.7	0.2		2.5		11.5		
RNHP `21	0.2	4.2	0.7		1.4		3.5		

RHNP: Ratio to Next Higher Position. Indicating how many people are in a position for every next-level position. For example, a ratio of 11:1 for Analysts indicates that there are 11 Analysts for every 1 senior-level position. These ratios are being used as a very rough measure of demand or level of competition for promotion.

How has salary progression looked in the past decade for the most common IRPE positions?

- The average salary for Analyst and Senior Analysts⁸ rose by approximately 25% from \$75k in 2012 to \$93k in 2021.
- Directors experienced similar salary growth, with a 30% rise in the average earned salary of a Director from \$111k in 2012 to \$145k in 2021.
- The Dean position experienced less salary growth, up 13% from \$140k in 2012 to \$158k in 2021.
- Vice President and Vice Chancellor salaries rose by 41% from \$153k in 2012 to \$217k in 2022.

Earned Salaries by Position Each Year

Year	Analyst/Senior Analyst	Director	Dean	Vice-President, Vice-Chancellor
2012	\$74,951	\$111,299	\$139,971	\$153,167
2013	\$75,157	\$117,594	\$148,758	\$152,273
2014	\$74,752	\$121,545	\$133,140	\$152,224
2015	\$77,308	\$131,889	\$146,542	\$167,340
2016	\$81,765	\$128,872	\$142,474	\$163,225
2017	\$82,665	\$123,260	\$143,166	\$173,173
2018	\$84,736	\$135,512	\$146,050	\$164,769
2019	\$88,234	\$135,110	\$152,850	\$168,730
2020	\$92,062	\$141,457	\$163,092	\$181,807
2021	\$93,335	\$145,576	\$158,039	\$216,712
Average 10 Year	\$82,496	\$129,212	\$147,408	\$169,342
Change from 2012 to 2021	25%	31%	13%	41%

⁸ We combined the Analyst and Senior Analyst salaries as many Analysts were promoted to Senior Analysts within a fiscal year. Since Transparent California only reports earned salaries as opposed to district salary scales, it is difficult to distinguish salary increases from promotions. That is, if a person is an Analyst for four months and then gets promoted to Senior Analyst for the remaining eight months of the year, Transparent California only reports the total earnings for the year and the last position, and therefore, it is not possible to distinguish that person's Analyst salary from their Senior Analyst salary for that year.

In addition, outliers were removed to account for reported salaries where an IRPE employee left or joined partway through the year. Outliers were defined as salary fluctuation of 20% or more for any individual across years within the same position. We observed significantly lower reported salaries in a year within the same position, typically in the first or last observed year. We interpreted these fluctuations as incomplete reporting years since position start or end dates rarely coincide with fiscal year reporting cycles. In order not to bias the average salary calculation, these outliers were removed.

The LinkedIn analyses focused on understanding IRPE professionals' career trajectories in terms of the time spent in any given IRPE position and common career paths/advancements. The three research questions about IRPE career trajectories are answered below.

What are the most common CCC IRPE career trajectories?

- Most common career advancement was from Analyst to Director position with an average time of 6.2 years (n=42).
- Analyst to Senior Analyst was also common with an average of 3.7 years (n=24).
- There are a few examples of rising from Analyst to Vice President (n=5) and Analyst to President (n=2); however, it is important to note that these individuals did have positions in between.
- Staying in the same classification of position was more common (n=232) than advancing to higher-level positions (n=133).

Number and Average Length of Time in CCC IRPE Position: No Change from Initial Position vs. Career Advancements

First CCC IRPE Position	Current HE Position in Higher Education	N	Years to Current Position
No Change in Position			
Analyst	Analyst	146	4.8
Director	Director	39	5.2
Dean	Dean	23	5.1
Senior Analyst	Senior Analyst	17	5.8
Vice President	Vice President	7	4.0
Career Advancement			
Analyst	Director	42	6.2
Analyst	Senior Analyst	24	3.7
Analyst	Dean	19	5.8
Dean	Vice President	10	3.1
Director	Dean	8	5.4
Director	Vice President	8	12.5
Analyst	Vice President	5	14.7
Senior Analyst	Dean	5	7.2
Director	President	3	9.5
Senior Analyst	Director	3	7.2
Analyst	President	2	5.7
Dean	President	2	8.8
Vice President	President	2	5.3

How common is it to exit higher education altogether after entering the CCC IRPE field?

Exiting IRPE and higher education completely was the second most observed pattern for people who started as Senior Analyst. Exiting IRPE and higher education was less common for people who started at higher-level positions (Director and above) and the fourth most observed pattern for people starting as analysts.

Number of CCC IRPE Professionals Who Exit Higher Education Based on Initial IRPE Position

First CCC IRPE Position	Current Position	N
Analyst	Analyst	132
Analyst	Director	39
Analyst	Senior Analyst	22
Analyst	Exit Higher Education/IRPE	21
Analyst	Dean	18
Analyst	Vice President	4
Analyst	President	2
Senior Analyst	Senior Analyst	15
Senior Analyst	Exit Higher Education/IRPE	5
Senior Analyst	Dean	4
Senior Analyst	Director	3
Director	Director	35
Director	Dean	8
Director	Vice President	7
Director	Exit Higher Education/IRPE	3
Director	President	3
Dean	Dean	23
Dean	Director	11
Dean	Vice President	9
Dean	Exit Higher Education/IRPE	2
Dean	President	2
Vice President	Vice President	8
Vice President	Exit Higher Education/IRPE	1
Vice President	President	1

What is the most common career trajectory for CCC IRPE people who leave the CCC system?

The most common observed pattern when leaving the CCC IRPE field is to move to an IRPE position in another higher education sector⁹ (e.g., UC, CSU, private universities). This move most often represented a promotion; with the two most common moves being Analyst to Director (N=13) and Analyst to Senior Analyst (N=6).

Current Higher Education (HE) Position of CCC IRPE Professionals and Average Length of Time from First IRPE Position to Current HE Position

First CCC IRPE Position	Current Position in Higher Education	N	Years to Current Position
Analyst	Director	13	5.3
Analyst	Senior Analyst	6	3.2
Dean	Director	5	2.8
Analyst	Analyst	4	4.3
Analyst	President	1	3.2
Analyst	Vice President	1	0.5
Dean	Analyst	1	0.8
Dean	Vice President	1	3.2
Director	President	1	9.5
Senior Analyst	Dean	1	5.4
Vice President	Director	1	3.5
Vice President	President	1	9.3

⁹ Vast majority stayed within the state with very few moving to other systems outside of California.

How livable are the wages of the IRPE analyst position?

To explore how livable wages are for IRPE professionals, we focus on the largest group of IRPE professionals, the Research Analyst position; and specifically the last step in the published district salary scales in 2022-2023. The full results with all available positions and first and last salary step scales can be found in this [Salary Scale Analysis Google Sheet](#).

Starting salaries (first salary step) for Research Analysts vary across the state and range from \$47k to \$110k, and ending salaries (last step) range from \$56k to \$138k. We see higher salaries typically offered in coastal counties where the cost of living is usually higher. For that reason, we wanted to add an additional metric of affordability that takes median home prices into account by calculating the percentage of a Research Analyst's monthly salary that would go toward a mortgage payment.¹⁰

An analysis of this metric of affordability revealed a few interesting findings. In general, there was almost no correlation between salary and affordability ($r=-.025$) suggesting that purchasing power primarily varies by district and not only by region. Figure 6 provides a visual representation of the relationship between salary and affordability which shows that only a few districts falling in the middle range of yearly income are above the recommended threshold of 35% (the maximum percentage of one's salary or gross income to mortgage expenses). Specifically, four districts (Gavilan, Marin, San Jose-Evergreen, and San Mateo) and their respective seven colleges (Canada, Evergreen, Gavilan, Marin, San Jose, Skyline, and San Mateo) were above the recommended 35% threshold.¹¹

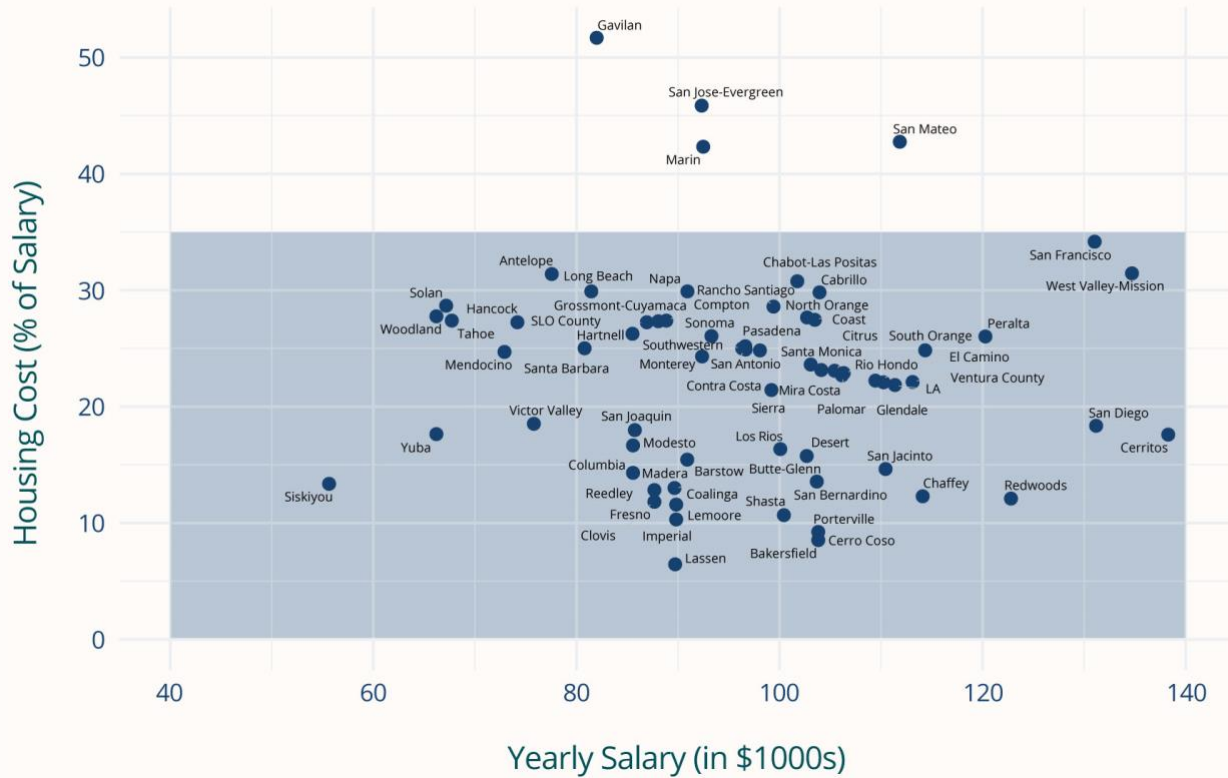
Overall, this analysis suggests that the vast majority of research analysts can potentially afford to purchase a house if they reach the end of the salary scales (typically 5 to 8 steps) but variations between districts and regions remain. It is important to note that this analysis contains several limitations. Primarily, housing prices and interest rates fluctuate tremendously, especially after the pandemic which puts home purchases out of reach for many. The current analysis did not take the present interest rates (close to 8% in April 2024) into account. Additionally, home prices vary substantially within a county and even if the median home price is affordable, it might be undesirable due to driving distance or home location. Individual research offices can build on this analysis with better and more detailed estimates given their local knowledge. The substantial variation for colleges in close proximity to each other could also trigger a more detailed salary norming or salary update process to make the prospects of hiring talented researchers more competitive.

¹⁰ Percent of monthly salary that goes to principal and interest payment of a median priced entry home in the county (see methodology section for more details).

¹¹ An analysis using starting salary was also conducted and showed a significant decrease in the number of colleges and districts above the 35% threshold compared to the same analysis looking at the first salary step (not shown, see methodology section for link to full dataset). Home affordability based on the first salary step revealed 16 districts and 24 colleges above the threshold.

Research Analyst Housing Affordability by District

Analyst - Last Salary Step - Median Starter Home Price (County)

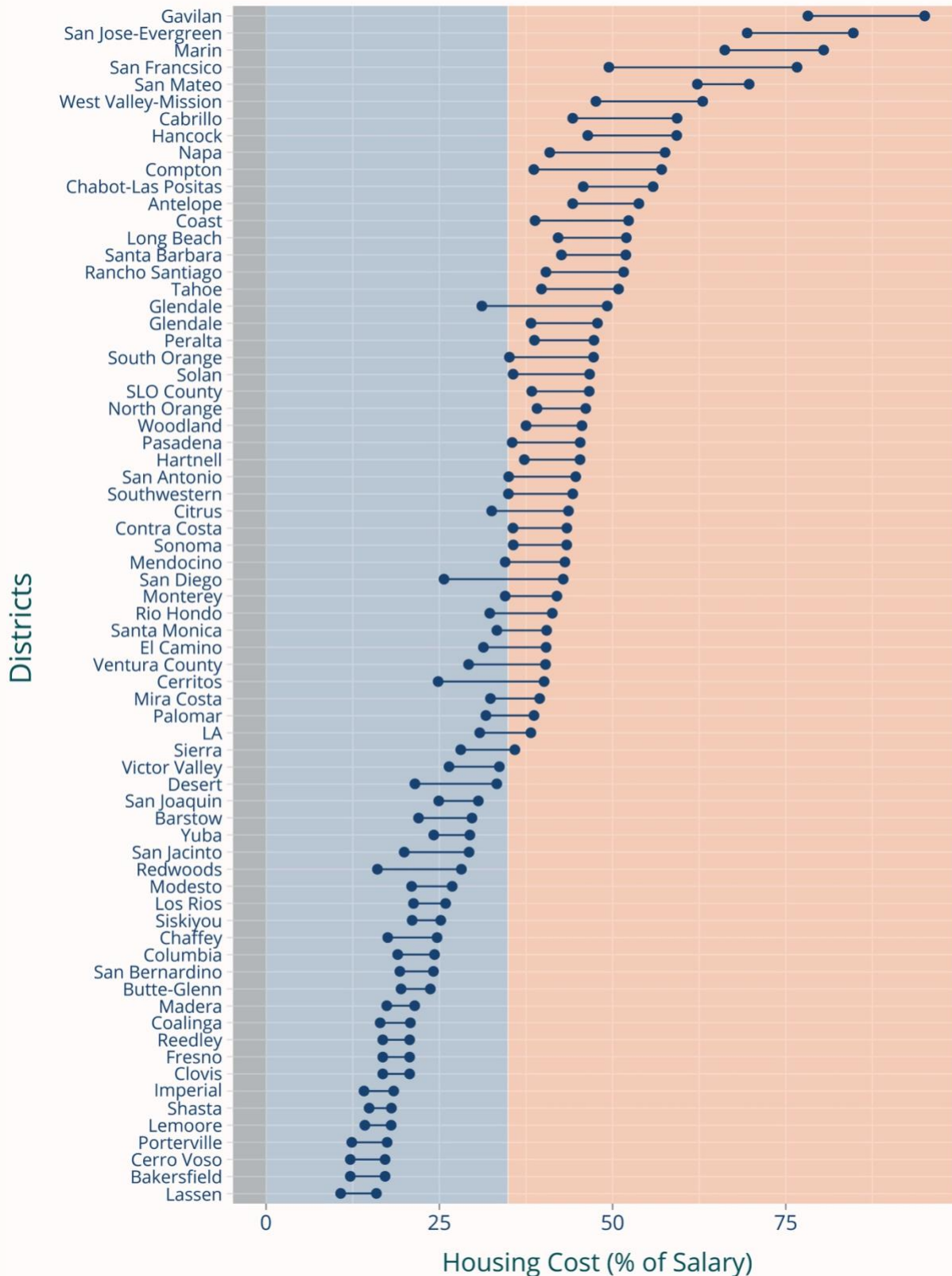


Notes:

- Shortened district names are used for all districts where the colleges resided in the same county. For Yuba, Yosemite, West Hills, State Center, and Kern CCDs, the college names are used as they reside in different counties.
- Housing Cost: percentage of monthly salary needed to pay for the mortgage of a median-priced entry home with 3.96% interest rate for a 30-year fixed mortgage and 20% down payment.
- Yearly Salary: The last step in the salary scale for Research Analysts.
- Values below 35% are highlighted blue as they are within the ideal income to mortgage ratio. See appendix for full table.

Research Analyst Housing Affordability by County - Median Start Home Price

Analyst- Affordability - Median Priced Home (County)



Concluding Remarks

As an ongoing effort to support the CCC IRPE profession and field, The RP Group has conducted several studies to understand the current state of the CCC IRPE field. This study is but one of these many efforts (e.g., IRPE Offices Survey) to understand the state of the CCC IRPE field as a way to support the growth of the IRPE field. Based on this set of analyses, we find that the IRPE field as a whole has grown significantly over the last 10 years at all position levels. However, opportunities for promotion within the CCC IRPE field are limited (i.e., fewer positions in management/leadership roles than analyst roles) and oftentimes require moving to other districts or systems of higher education, and some end up leaving the IRPE field altogether. While IRPE salaries are competitive as a whole, there is a lot of variability in whether salaries in certain regions are keeping up with home affordability in those regions.

Using the results from this set of analyses, the following are a few areas of opportunity for The RP Group to expand its support of the IRPE community.

- Commit to repeat this study every 3-5 years to keep a pulse on the IRPE career landscape
- Identify potential keynote speakers for the annual RP conference and other events who can share their origin stories to help inform, motivate, and inspire IRPE professionals interested in career advancement
- Create professional development opportunities through conference presentations and webinars that include recommendations and advice on how to advance in the field

In addition, we have identified two ways that individual IRPE offices can use the information from this study:

- Support job description and salary considerations to ensure salary competitiveness
- Increase support and opportunities for and encourage IRPE staff to connect with others in the field and the CCC system to build a network of contacts who can help increase their chances of advancement

Moreover, while this study offers a helpful initial snapshot of the IRPE field, future research on the state of the IRPE community could be complemented by disaggregations based on different demographics such as gender, race/ethnicity, and degree attainment to explore and address any potential equity disparities to inform recruitment and retention efforts in the IRPE field.

Affordability Indices by District and County

Abbr. District/College	County	Yearly Salary (last step)	Housing Cost (% of Salary)
Antelope	Los Angeles	\$77,563	31%
Bakersfield	Kern	\$103,819	9%
Barstow	San Bernardino	\$90,896	15%
Butte-Glenn	Butte	\$89,650	13%
Cabrillo	Santa Cruz	\$103,917	30%
Cerritos	Los Angeles	\$138,247	18%
Cerro Coso	Kern	\$103,819	9%
Chabot-Las Positas	Alameda	\$101,733	31%
Chaffey	San Bernardino	\$114,072	12%
Citrus	Los Angeles	\$105,414	23%
Clovis	Fresno	\$87,666	12%
Coalinga	Fresno	\$89,821	12%
Coast	Orange	\$103,465	27%
Columbia	Tuolumne	\$85,550	14%
Compton	Los Angeles	\$88,855	27%
Contra Costa	Contra Costa	\$96,658	25%
Desert	Riverside	\$102,669	16%
El Camino	Los Angeles	\$109,416	22%
Fresno	Fresno	\$87,666	12%
Gavilan	Santa Clara	\$81,974	52%
Glendale	Los Angeles	\$110,220	22%
Grossmont-Cuyamaca	San Diego	\$88,080	27%
Hancock	Santa Barbara	\$74,173	27%
Hartnell	Monterey	\$85,488	26%
Imperial	Imperial	\$89,835	10%
LA	Los Angeles	\$111,337	22%
Lassen	Lassen	\$89,710	6%
Lemoore	Kings	\$89,821	10%
Long Beach	Los Angeles	\$81,453	30%
Los Rios	Sacramento	\$100,072	16%
Madera	Madera	\$87,666	13%
Marin	Marin	\$92,477	42%
Mendocino	Mendocino	\$72,900	25%
Mira Costa	San Diego	\$104,069	23%
Modesto	Stanislaus	\$85,550	17%
Monterey	Monterey	\$92,364	24%
Napa	Napa	\$90,924	30%

Abbr. District/College	County	Yearly Salary (last step)	Housing Cost (% of Salary)
North Orange	Orange	\$102,696	28%
Palomar	San Diego	\$106,118	23%
Pasadena	Los Angeles	\$96,637	25%
Peralta	Alameda	\$120,226	26%
Porterville	Tulare	\$103,819	9%
Rancho Santiago	Orange	\$99,382	29%
Redwoods	Humboldt	\$122,762	12%
Reedley	Fresno	\$87,666	12%
Rio Hondo	Los Angeles	\$106,330	23%
San Antonio	Los Angeles	\$98,058	25%
San Bernardino	San Bernardino	\$103,646	14%
San Diego	San Diego	\$131,141	18%
San Francisco	San Francisco	\$130,992	34%
San Jacinto	Riverside	\$110,430	15%
San Joaquin	San Joaquin	\$85,704	18%
San Jose-Evergreen	Santa Clara	\$92,338	46%
San Mateo	San Mateo	\$111,821	43%
Santa Barbara	Santa Barbara	\$80,787	25%
Santa Monica	Los Angeles	\$103,080	24%
Shasta	Shasta	\$100,416	11%
Sierra	Placer	\$99,195	21%
Siskiyou	Siskiyou	\$55,640	13%
SLO County	San Luis Obispo	\$86,916	27%
Solan	Solano	\$67,184	29%
Sonoma	Sonoma	\$93,288	26%
South Orange	Orange	\$114,338	25%
Southwestern	San Diego	\$96,304	25%
Tahoe	El Dorado	\$67,724	27%
Ventura County	Ventura	\$113,076	22%
Victor Valley	San Bernardino	\$75,795	19%
West Valley-Mission	Santa Clara	\$134,679	31%
Woodland	Yolo	\$66,206	28%
Yuba	Yuba	\$66,206	18%